

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) An apparatus for evaporative cooling of a liquid product, comprising a vacuum chamber possessing upper and lower end walls and divided into a first~~[[,]]~~ space centrally positioned space-with respect to the longitudinal axis of the vacuum chamber and a second space which concentrically surrounds the first space and in which both the first and second spaces are open towards the upper end wall of the vacuum chamber, and the first space has an outlet for condensed steam and the second space has an inlet for steamed product, as well as an outlet for the product~~[[,]]~~; ~~and~~ a circulation circuit for coolant liquid, wherein the first space is extended downwards so that it extends at least as long below the ~~bottom-lower~~ end wall of the vacuum chamber as the extent of the first space inside the vacuum chamber; and a coolant conduit positioned in a portion of the first space located below the lower end wall for delivering coolant to cool the condensed steam.

2. (Currently Amended) The apparatus as claimed in Claim 1, wherein the first space has an upper part located inside the vacuum chamber and a lower part located beneath the ~~bottom-lower~~ end wall of the vacuum chamber.

3. (Previously Presented) The apparatus as claimed in Claim 1, wherein the inlet for product is tangentially disposed in a side wall of the vacuum chamber and is formed as a vertical gap.

4. (Previously Presented) The apparatus as claimed in Claim 1, wherein the circulation circuit for coolant water discharges with a conduit in an upper region of a lower part of the first space.

5. (Previously Presented) The apparatus as claimed in Claim 1, wherein the outlet for condensed steam is a spillway overflow.

6. (Previously Presented) The apparatus as claimed in Claim 4, wherein the conduit is provided in its upper region with a number of downwardly directed apertures.

7. (Previously Presented) The apparatus as claimed in Claim 4, wherein the circulation circuit for coolant liquid includes an outlet, conduits, a centrifugal pump, as well as a cooler.

8. (New) The apparatus as claimed in Claim 1, wherein ingress and egress of the coolant is at a lower portion of the first space.